Non-Credit Course Outline: Lead, Mercury and Manganese Awareness
Time: One hour
For: City of Cleveland, Healthy Homes Initiative
Created by: Cuyahoga Community College

Introduction to Metals – History and Use – Lead, Mercury, Manganese

Lead
1. Pathways into the Body
2. Effects of exposure
3. Exposure Limits
4. Detection
5. Reducing Exposure
6. Sources of lead in water supply. Water treatment techniques to prevent lead from leaching into water supply

Mercury
1. Pathways into the Body
2. Effects of exposure
3. Exposure Limits
4. Detection
5. Reducing Exposure

Manganese
1. Pathways into the Body
2. Effects of exposure
3. Exposure Limits
4. Detection
5. Reducing Exposure

Objectives
At the end of the session on Lead and other metals, the student will be able to:
1. Describe the properties, sources and uses of lead, manganese, mercury.
2. Identify locations where lead, manganese and mercury-containing materials are commonly found.
3. Explain the hazards of lead, mercury and manganese exposure.
4. Describe the pathways through which lead, manganese and mercury enter the body.
5. Explain the difference between the OSHA standard for workplace lead exposure and public health standards for protecting children and other vulnerable members of the population.
6. Describe monitoring for and protective measures against lead exposure.

7. Explain the proper response to discovery of a mercury spill.